

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

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Washington, DC 20231  
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in its capacity as elected Office

Date of mailing (day/month/year) 28 January 1999 (28.01.99)	Applicant's or agent's file reference 6741/KL
International application No. PCT/US98/13280	Priority date (day/month/year) 26 June 1997 (26.06.97)
International filing date (day/month/year) 26 June 1998 (26.06.98)	
Applicant ROSELLE, Brian, Joseph et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
29 December 1998 (29.12.98)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Ting Zhao Telephone No.: (41-22) 338.83.38
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# 1 ENT COOPERATION TREATY

## PCT

COMMUNICATION IN CASES FOR WHICH  
NO OTHER FORM IS APPLICABLE

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To:

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Date of mailing (day/month/year) 02 February 1999 (02.02.1999)	
Applicant's or agent's file reference 6741/KL	REPLY DUE see paragraph 1 below
International application No. PCT/US98/13280	International filing date (day/month/year) 26 June 1998 (26.06.1998)
Applicant THE PROCTER & GAMBLE COMPANY	

1. ☐ REPLY DUE within \_\_\_\_\_ months/days from the above date of mailing
- ☐ NO REPLY DUE, however, see below
- ☒ IMPORTANT COMMUNICATION
- ☐ INFORMATION ONLY


2. COMMUNICATION:

The International Bureau acknowledges receipt of 6 Powers of Attorney concerning the above-identified international application.

Please note that applicants GEIS, CHUNG and TRINH do not appear on the request form.

Please clarify.

Many thanks and best regards,

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Céline Faust 
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>A23P 1/00</b>		(11) International Publication Number: <b>WO 99/00026</b>	
<b>A1</b>		(43) International Publication Date: <b>7 January 1999 (07.01.99)</b>	
(21) International Application Number: <b>PCT/US98/13280</b>		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: <b>26 June 1998 (26.06.98)</b>			
(30) Priority Data: 60/050,839 <b>26 Dec 99/30 ms</b> <b>26 June 1997 (26.06.97)</b> <b>US</b> 60/075,069 <b>18 February 1998 (18.02.98)</b> <b>US</b>			
(71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).			
(72) Inventors; and (75) Inventors/Applicants (for US only): ROSELLE, Brian, Joseph [US/US]; 1490 Bruton Parish Way, Fairfield, OH 45014 (US). WARD, Thomas, Edward [US/US]; 3623 Red Oak Road, Oregonia, OH 45054 (US). ROLLINS, David, Kent [US/US]; 2100 Broadhurst, Cincinnati, OH 45240 (US).			
(74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).		Published With international search report.	

(54) Title: MICROORGANISM REDUCTION METHODS AND COMPOSITIONS FOR FOOD ✓

## (57) Abstract

Basic cleaning compositions using toxicologically-acceptable ingredients for treating food such as produce, e.g., fruits and vegetables, and edible animal proteins are provided. Liquid formulations comprising, optionally, less than about 0.5% detergent surfactant, such as potassium alkyl sulfate, that does not affect palatability and basic buffer to provide a pH of at least 10.5 are applied to food products immediately before consumption and allowed to stay for at least about one half minute to significantly reduce microorganism contamination. The food can be consumed without rinsing.

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# INTERNATIONAL SEARCH REPORT

Inte Application No

PCT/US 98/13280

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 6 A23P1/00

According to International Patent Classification(IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 A23P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 15202 A (PROCTER & GAMBLE) 1 May 1997  see claims see page 5, line 23 - line 29 see page 10, line 1 - line 4 see page 14, line 31 - page 15, line 5	1-3,8,9, 12,15, 18-21
A	WO 97 01623 A (PROCTER & GAMBLE) 16 January 1997  see claims	1-3,8,9, 12,15, 18-21
A	WO 97 01288 A (PROCTER & GAMBLE) 16 January 1997  see claims	1-3,8,9, 12,15, 18-21

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "G" document member of the same patent family

Date of the actual completion of the international search

8 October 1998

Date of mailing of the international search report

16/10/1998

Name and mailing address of the ISA

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Authorized officer

Lepretre, F

# INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/US 98/13280

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9715202 A	01-05-1997	EP 0857024 A	12-08-1998
WO 9701623 A	16-01-1997	AU 6112496 A	30-01-1997
		CA 2225535 A	16-01-1997
		EP 0836638 A	22-04-1998
		US 5749924 A	12-05-1998
WO 9701288 A	16-01-1997	AU 5978196 A	30-01-1997
		AU 6342796 A	30-01-1997
		EP 0835063 A	15-04-1998
		EP 0835065 A	15-04-1998
		WO 9701290 A	16-01-1997

PCT

REC'D 23 SEP 1999

WIPO PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 6741/KL	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US98/13280	International filing date (day/month/year) 26/06/1998	Priority date (day/month/year) 26/06/1997
International Patent Classification (IPC) or national classification and IPC A23P1/00		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 29/12/1998	Date of completion of this report 22. 09. 1999
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer Lepretre, F Telephone No. +31 70 340 2994 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US98/13280

## I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

### Description, pages:

1-17 as originally filed

### Claims, No.:

1-21 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	4-7,10,11,13,14,16,17
	No:	Claims	1-3,8,9,12,15,18-21
Inventive step (IS)	Yes:	Claims	4-7,10,11,13,14,16,17
	No:	Claims	1-3,8,9,12,15,18-21
Industrial applicability (IA)	Yes:	Claims	1-21
	No:	Claims	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US98/13280

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**2. Citations and explanations**

**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US98/13280

**Re item V**

**1 Citations**

Reference is made to the following document:

D1: WO 97/15202 A

**2 Novelty (Article 33(2) PCT)**

Document D1 describes cleaning sanitizing methods and compositions suitable for fruits and vegetables.

The compositions have a pH of more than 9.5, preferably in the range of from 11.5 to 12.5 and comprise a basic carbonate buffer and optionally up to 0.2% anionic surfactant (see claims 1-4). The composition is safe even when the produce is not completely rinsed (see page 5, lines 23-29) and the treatment is carried out for at least about one minute (see page 14, lines 31 - page 15, line 5).

Thus, D1 already discloses all the features of claim 1.

The subject-matter of claims 2,3,8,9,12,15 (see the viscosity requirements page 10, lines 1-4), 18-21 is also known from D1.

It is pointed out that the expression of claim 21 "impure water" is not clear and well defined. It is hence considered that the water used in D1 is at least to some extent "impure".

**3 Inventive step (Article 33(3) PCT)**

The problem underlying the present invention can be seen in the provision of a method and composition for reducing the level of microorganisms on food products, wherein said food does not need to be rinsed before consumption and water which is not safe for use can be used for dilution.

It is not readily apparent, in view of the high number of optional or possible alternative components of the treatment solution (especially as disclosed in claims 2-6 and 8-14) how such result is achieved.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US98/13280

The subject-matter of claims 4-7,10,11,13,14,16,17 is however not disclosed or suggested in the available prior art and could therefore support the inventive step of a new independent claim.

**Re item VII**

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

**Re item VIII**

Claim 1 does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The claim attempts to define the subject-matter in terms of the result to be achieved which merely amounts to a statement of the underlying problem: "the composition being essentially free of any material that adversely affects safety or palatability, so that said food does not need to be rinsed before consumption". The technical features necessary for achieving this result are not disclosed. It should be noted that any independent claim must contain all the technical features essential to the invention (Article 6 PCT taken in combination with Rule 6(3)(b) PCT).

PCT/US 98/13280  
RO/US 20 NOV 1998

PATENT COOPERATION TREATY  
(Appointment of Agent or Common Representative)  
POWER OF ATTORNEY

REC'D 27 JAN 1999

WIPO

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The undersigned applicant:

Philip Anthony Geis  
8226 Bay Tree Court  
West Chester, Ohio 45069

(Complete name and address)

hereby appoints:

Hasse, Donald E.  
Reed, T. David  
Hughett, Eileen L.  
Guffey, Timothy B.  
Hiland, Emelyn L.

U.S. Registration No.

29,387  
32,931  
34,352  
41,048  
41,501

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as attorney/agent to act on his/her behalf, with full power of substitution, before all competent international authorities in connection with any and all international applications filed by him/her with either the United States Receiving Office or The International Bureau of W.I.P.O. Receiving Office and to make or receive payments on behalf of the undersigned.

Signed at Cincinnati, Ohio USA  
on this 3 day of November 19 98.

Philip Anthony Geis  
Philip Anthony Geis

PO/US 98 / 13280

RO/US 20 NOV 1998

PATENT COOPERATION TREATY  
(Appointment of Agent or Common Representative)  
POWER OF ATTORNEY

REC'D 27 JAN 1999

WIPO

The undersigned applicant:

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Hughett, Eileen L.  
Guffey, Timothy B.  
Hiland, Emelyn L.

U.S. Registration No.

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Signed at Cincinnati Ohio  
on this 17<sup>th</sup> day of August 19 98

Alex Haejoon Chung  
Alex Haejoon Chung

PATENT COOPERATION TREATY  
(Appointment of Agent or Common Representative)  
POWER OF ATTORNEY

REV	27 JAN 1999
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The undersigned applicant:

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(Complete name and address)

hereby appoint:

Hasse, Donald E.	29,387
Reed, T. David	32,931
Hughett, Eileen L.	34,352
Dostie, George E.	39,173

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as agents to act on his/her behalf, with full power of substitution, before the competent international authorities filed by him/her with either the United States Receiving Office or The International Bureau of W.I.P.O. Receiving Office and to make or receive payments on our behalf.

Signed at Cincinnati, Ohio  
on this 22<sup>nd</sup> day of July 19 96

Toan Trinh